

**IN THE CLAIMS**

1. (Currently Amended) A plasma surgical device for reducing bleeding in living tissue by means of a gas plasma, comprising a plasma-generating system having an anode (1) , a cathode (8) and a gas supply channel (17) for supplying gas to the plasma-generating system, the plasma-generating system comprising at least one electrode(3,5), which is arranged between said cathode (8) and said anode(1), and the plasma-generating system being enclosed by a housing (12) of an electrically conductive material, which is connected to the anode(1), ~~characterised in that~~ wherein said housing (12) forms said gas supply channel (17) .

2. (Currently Amended) A plasma surgical device according to claim 1, in which said housing(12), in addition to said gas supply channel(17), forms at least one additional channel(15,16).

3. (Currently Amended) A plasma surgical device according to claim 2, in which said housing(12), in addition to said gas supply channel(17), forms at least two additional channels(15,16).

4. (Currently Amended) A plasma surgical device according to claim 3, in which said gas supply channel (17) is arranged at the centre of the housing (12) and the additional channels (15,16) are arranged along the circumference of the gas supply channel(17).

5. (Currently Amended) A plasma surgical device according to ~~claim 3 or 4~~ claim 3, in which said additional channels (15,16) are cooling channels for supplying and discharging a coolant.

6. (Currently Amended) A plasma surgical device according to ~~any one of the preceding claims~~ claim 1, in which the housing (12) forms a supply portion, in which said gas

supply channel (17) is formed, and a plasma-generating portion, in which said plasma-generating system is provided.

7. (Currently Amended) A plasma surgical device according to ~~any one of the preceding claims~~ claim 1, in which said cathode (8) is connected to a conductor (11) for connection to a voltage source.

8. (Currently Amended) A plasma surgical device according to claim 7, in which said conductor (11) is adapted to extend through one of the channels (15, 16, 17) in said housing (12).

9. (Currently Amended) A plasma surgical device according to claim 8, in which the conductor (11) extends through a gas supply channel (17) arranged at the centre of said housing (12).

10. (Currently Amended) A plasma surgical device according to ~~any one of the preceding claims~~ claim 1, in which said plasma-generating system comprises at least two electrodes (3, 5), which are insulated from each other by an insulator (4).

11. (Currently Amended) A plasma surgical device according to ~~any one of the preceding claims~~ claim 1, in which said at least one electrode (3, 5) is mounted in a holding means (7) made of an electrically insulating material.

12. (Currently Amended) A plasma surgical device according to claim 11, in which said electrodes (3, 5), and an insulator (4) if any, are press fitted to said holding means (7).

13. (Currently Amended) A plasma surgical device according to ~~claim 11 or 12~~ claim 11, in which said cathode (8) is arranged in the holding means (7) concentrically with and spaced from an electrode (5) closest to the cathode (8).

14. (Currently Amended) A plasma surgical device according to claim 13, in which said cathode (8) is mounted in the holding means (7) by means of a cathode holder (9), which is press fitted to the holding means (7).

15. (Currently Amended) A plasma surgical device according to ~~claim 13 or 14~~ claim 13, in which an insulating tube (6) of a ceramic material is mounted on the inside of the holding means (7) so as to enclose the cathode (8).

16. (Currently Amended) A plasma surgical device according to ~~any one of claims 13-15~~ claim 13, in which the holding means (7) has a connection end, which is connected to said gas supply channel (17), so that gas is passed through the holding means (7) to the cathode (8) and then through said at least one electrode (3, 5) towards the anode (1).

17. (Currently Amended) A plasma surgical device according to claim 16, in which the holding means (7) has an outer shape such as to allow a fluid to flow respectively from and to the additional channels (15, 16) in a space formed between the holding means (7) with said electrode (5, 3), and insulators (4) if any, and the inner wall of the housing (12) at the holding means (7).

18. (Currently Amended) A plasma surgical device according to ~~any one of the preceding claims~~ claim 1, in which a gasket (2) is arranged between the anode (1) and the electrode (3) closest to the anode (1), and the plasma-generating system is arranged in such manner in the housing (12) that the anode (1) is connected to the housing (12), a predetermined compressive force being applied to the gasket (2), so that a watertight seal is established between the housing (12) and the anode (1) and electrical contact therebetween is ensured.

19. (Currently Amended) A plasma surgical device according to ~~any one of the preceding claims~~ claim 1, in which said housing (12) is surrounded by a first contact ring (27) in electrical contact therewith, which contact ring is connected to earth.

20. (Currently Amended) A plasma surgical device according to claim 19, in which said housing (12) is surrounded by a second contact ring (24), which is capable of being used to constantly control the earthing of the housing (12).

21. (Currently Amended) A plasma surgical device according to ~~any one of claims 2-19~~ claim 2, in which a connecting device is provided for connecting the gas supply to said gas supply channel (17) and any desired function to said additional channels (15,16).

22. (Currently Amended) A plasma surgical device according to claim 21, in which said connecting device has an outlet end, which defines connecting channels for obtaining a fluidtight fit in said gas supply channel (17) and additional channels (15,16), and an inlet end provided with hose couplings (18,19,20) for connecting hoses to each of said connecting channels.

23. (Currently Amended) A plasma surgical device according to ~~claim 21 or 22~~ claim 21, in which said connecting device also has a conductor opening through which a cathode conductor (11) extends for connection to a voltage source.

24. (Currently Amended) A plasma surgical device according to ~~any one of claims 2-23~~ claim 2, in which said housing (12) is connected to hoses for supplying gas and any desired function to the additional channels, which hoses are connected, at their other end, to a connector for connection to a supply unit.

25. (Currently Amended) A plasma surgical device according to ~~any one of the preceding claims~~ claim 1, which comprises a handle portion that at least partially encloses said housing (12) to allow easy handling of the device.

26. (Currently Amended) A plasma surgical device according to claim 20, which comprises a circuit adapted to distinguish the device type by means of the

resistance of an indication component ~~(25)~~.

27. (Currently Amended) A plasma surgical device according to ~~any one of the preceding claims~~ claim 1, which has a first button ~~(26)~~ for switching the plasma generator on and off.

28. (Currently Amended) A plasma surgical device according to claim 27, which, for increased reliability, has a second button ~~(26)~~.